

Contents of Volume 4

NUMBER 1 JANUARY 1990

| | |
|--|----|
| The Intramolecular Migration of a Trimethylsilyl Group Located α to a Sulfone in Substituted Cyclohexyl Systems | 1 |
| K. V. WOOD, A. P. ROTHWELL, M. B. ANDERSON AND P. L. FUCHS | |
| The Dissociative Ionization of H₂ by Electrons | 5 |
| E. KRISHNAKUMAR AND D. MATHUR | |
| Discrimination Effects in Inorganic Ion-cluster Detection by Secondary-electron Multiplier in Mass Spectrometry Experiments | 9 |
| M. L. ALEXANDROV, L. N. GALL, N. V. KRASNOV, L. R. LOKSHIN AND A. V. CHUPRIKOV | |
| Abnormal Effects in the Detection of Ions from Bioorganic Substances by Mass Spectrometry | 13 |
| M. L. ALEXANDROV, L. N. GALL, N. V. KRASNOV, L. R. LOKSHIN AND A. V. CHUPRIKOV | |
| Cluster-ion Abundances and Geometrical Structures of Magnesium Oxide Clusters Generated by Bombardment with Xenon and Oxygen Ions | 16 |
| I. KATAKUSE, T. ICHIHARA, H. ITO AND M. HIRAI | |
| Methodological Approach to the Characterization of Diacylphosphatidyl Cholines in Rabbit Lung Lavage Fluid by Fast-atom Bombardment Mass Spectrometry | 19 |
| G. ALLMAIER, E. R. SCHMID, H. GASSER, W. STROHMAIER AND G. SCHLAG | |
| Capillary-zone Electrophoresis with Fraction Collection for Desorption Mass Spectrometry | 24 |
| R. TAKIGIKU, T. KEOUGH, M. P. LACEY AND R. E. SCHNEIDER | |
| Collisionally Activated Dissociation of Peptides Using a Quadrupole Ion-trap Mass Spectrometer | 30 |
| R. E. KAISER, JR., R. G. COOKS, J. E. P. SYKA AND G. C. STAFFORD, JR. | |
| Negative-ion Chemical Ionization Spectra of Oxazolidinone Derivatives of Amino Acids Prepared by their Reaction with Dichlorotetrafluoroacetone | 34 |
| R. G. MACFARLANE, D. G. WATSON AND J. M. MIDGLEY | |
| Isomer Discrimination of Polycyclic Aromatic Hydrocarbons in Negative-ion Chemical Ionization Mass Spectrometry Using Carbon Dioxide | 37 |
| C. M. ELSON AND P. G. SIM | |

NUMBER 2 FEBRUARY 1990

| | |
|--|----|
| Influence of Sequence on the Fragmentation of Serine- and Threonine-containing Peptides in ^{252}Cf-Plasma Desorption Mass Spectrometry | 41 |
| H. LAM-THANH, C. DEPRUN AND Y. LE BEYEC | |
| Translational Energy Release and Stereochemistry of Steroids. 15. Reaction Conformations of Metastable Molecular Ions in Stereoisomers of 3-Hydroxy Steroids | 44 |
| Z. V. I. ZARETSKII, D. GHOSH, A. G. BRENTON AND J. H. BEYNON | |
| Types of Quasimolecular Ions in Thermospray Ionization | 52 |
| H. MAEDER | |
| Internal Energy Effects in the Collision-induced Dissociation of Large Biopolymer Molecular Ions Produced by Electrospray Ionization-tandem Mass Spectrometry of Cytochrome c | 54 |
| R. D. SMITH AND C. J. BARINAGA | |
| Potential Misidentification of Trichlorophenylethanol in Imported Peppers | 58 |
| T. CAIRNS, E. G. SIEGMUND, T. L. BARRY AND G. PETZINGER | |
| Lowering Detection Limits in Plasma-desorption Mass Spectrometry by Partial Target Shielding | 61 |
| P. A. VAN VEELEN, U. R. TJADEN AND J. VAN DER GREEF | |
| High-resolution Ion Partitioning Technique for a One-section Ion-cyclotron-resonance Spectrometer Cell | 64 |
| E. N. NIKOLAEV, A. V. MORDEHAI AND V. L. TALROSE | |
| A Method Based on Catalytic Hydrogenation for the Identification of Monohydroxy Metabolites of Isomeric Tetrahydrocannabinols | 67 |
| D. J. HARVEY AND N. K. BROWN | |

NUMBER 3 MARCH 1990

| | |
|---|----|
| Recent Advances in Ion-trap Technology | 69 |
| I. W. GRIFFITHS | |
| Use of Charge-separation Reactions for Sequencing Peptides | 74 |
| K. VEKEY, M. CANDIDO AND P. TRALDI | |

CONTENTS OF VOLUME 4

| | |
|---|-----------|
| Mass Spectral Fragmentations of Ionized Alkylperhydro-1,3-oxazines | 77 |
| P. VAINIOTALO, T. ROMPPANEN AND P.J. MALKONEN | |
| An Electrospray-ionization Mass Spectrometer with New Features | 81 |
| S. K. CHOWDHURY, V. KATTA AND B. T. CHAIT | |
| On-line Liquid Chromatography/Fast-atom Bombardment of Protein Tryptic Digests | 88 |
| D. J. BELL, M. D. BRIGHTWELL, W. A. NEVILLE AND A. WEST | |
| A Terbody Complex Intermediate in [Alkyl Ether···H···Alcohol] Ions | 92 |
| C. MONTEIRO, H. E. AUDIER, P. MOURGUES AND D. BERTHOMIEU | |

NUMBER 4 APRIL 1990

| | |
|---|------------|
| Molecular Weight Determination of Underivatized Oligodeoxyribonucleotides by Positive-ion Matrix-assisted Ultraviolet Laser-desorption Mass Spectrometry | 99 |
| B. SPENGLER, Y. PAN, R. J. COTTER AND L.-S. KAN | |
| Fragment Pathway Analysis Using Automated Tandem Mass Spectrometry on an Ion-trap Mass Spectrometer | 103 |
| L. K. PANNELL, P. QUAN-LONG, R. T. MASON AND H. M. FALES | |
| The Use of Dynamically Programmed Scans to Generate Parent-ion Tandem Mass Spectra with the Ion-trap Mass Spectrometer | 108 |
| J. F. J. TODD, A. D. PENMAN, D. A. THORNER AND R. D. SMITH | |
| Use of <i>m</i>-Nitrobenzyl Alcohol as a Matrix in Fast-atom Bombardment Negative-ion Mass Spectrometry of Polar Compounds | 114 |
| J. -L. AUBAGNAC | |
| Characterization of Isomeric Pyranocoumarins by Collision-induced Tandem Mass Spectrometry | 117 |
| B. T. KIREMIRE, D. CHIARELLO, P. TRALDI, U. VETTORI, A. GUIOTTO AND P. RODIGHIERO | |
| Secondary-ion Mass Spectrometry of Particle Beams | 123 |
| P. E. SANDERS | |
| Evidence for a Reaction Window in Double-electron-capture Reactions in Collisions Involving the Molecular Target CH₃Br | 125 |
| M. L. LANGFORD AND F. M. HARRIS | |
| The Formation of HOS⁻ from Deprotonated Dimethyl Sulphoxide and Related Species | 129 |
| J. H. BOWIE, M. B. STRINGER AND R. N. HAYES | |
| Unimolecular Chemistry of the 4-Hexen-3-one Radical Cation | 131 |
| G. BOUCHOUX, F. DJAZI, P. JAUDON AND O. LEFEVRE | |
| A Method for the Structural Determination of Cannabichromene Metabolites by Mass Spectrometry | 135 |
| D. J. HARVEY AND N. K. BROWN | |

NUMBER 5 MAY 1990

| | |
|---|------------|
| Determination of the Charge State of Ions in Thermospray Mass Spectra | 139 |
| K. CHAN, D. WINTERGRASS AND K. STRAUB | |
| Ion Cyclotron Resonance Signal-detection at Multiples of the Cyclotron Frequency | 144 |
| E. N. NIKOLAEV, M. V. GORSHKOV, A. V. MOREDEHAI AND V. L. TALROSE | |
| Electrospray Ionization on a High-performance Magnetic-sector Mass Spectrometer | 147 |
| C.-K. MENG, C. N. MCEWEN AND B. S. LARSEN | |
| Peptide Sequencing with Electrospray Ionization on a Magnetic Sector Mass Spectrometer | 151 |
| C.-K. MENG, C. N. MCEWEN AND B. S. LARSEN | |
| The Use of 2-Hydroxyethyl Disulphide as a Matrix in Liquid Secondary-ion Mass Spectrometry | 156 |
| P. T. M. KENNY | |
| Computer-aided Interpretation of Mass Spectra by a Combination of Library Search with Principal Component Analysis | 159 |
| K. VARMUZA, W. WERTHER, D. HENNEBERG AND B. WEIMANN | |
| The Loss of Amine from Low Internal Energy Ions of Aminosteroid Stereoisomers | 163 |
| N. MOLLOVA, P. LONGEVIALLE AND G. BOUCHOUX | |
| Identification of 2-(2'-Octenyl) Succinic Acid in Urine | 170 |
| G. GIORDANO, W. J. McMURRAY, S. F. PREVIS, R. D. WELCH AND P. RINALDO | |
| A Fast Array Detector System | 173 |
| C. BRUNNEE, R. PESCH AND E. SCHRODER | |

CONTENTS OF VOLUME 4

NUMBER 6 JUNE 1990

| | |
|--|-----|
| An MNDO Study of Substituent Effects on the Electronic Structure and Geometry in the Ionization of CH₃-R Compounds (R=H, F, Cl, OH, SH, NH₂) | 178 |
| J. HRUSAK AND M. TKACZYK | |
| Mass Spectrometric Characterization of Different Norandrosterone Derivatives by Low-cost Mass Spectrometric Detectors Using Electron Ionization and Chemical Ionization | 181 |
| D. DE BOER, E. G. DE JONG AND R. A. A. MAES | |
| Computer Modelling of Fragmentation Processes in Radio Frequency Multipole Collision Cells | 186 |
| S. C. DAVIES AND B. WRIGHT | |
| Particle Beam Liquid Chromatography/Mass Spectrometry on a Double-focusing High Resolution Mass Spectrometer | 198 |
| L. BACZYN SKYJ | |
| Sequence-informative Fragmentation of Peptides up to a Molecular Weight of 4.6 kDa in Plasma-desorption Mass Spectrometry | 202 |
| H. J. VORST, M. W. E. M. VAN TILBORG, P. A. VAN VEELEN, U. R. TJADEN AND J. VAN DER GREEF | |
| Ion-spray Mass Spectrometry of Marine Toxins II. Analysis of Diarrhetic Shellfish Toxins in Plankton by Liquid Chromatography/Mass Spectrometry | 206 |
| S. PLEASANCE, M. A. QUILLIAM, A. S. W. DE FREITAS, J. C. MARR AND A. D. CEMBELL A | |
| Quantitative Analysis of 1-Stearoyl-2-oleoyl-sn-glycero-3-phosphoserine by Negative-ion Fast-atom Bombardment Mass Spectrometry | 214 |
| S. CHEN, G. KIRSCHNER AND E. BENFENATI | |
| Sequential Multiple-scan Monitoring Using an Ion-trap Mass Spectrometer | 217 |
| C. S. CREASER, D. S. MITCHELL, K. E. O'NEILL AND K. J. TRIER | |
| Observation of Isolated Electronic States in the Collision-induced Dissociation of Nitromethane Ions | 222 |
| K. QIAN, A. SHUKLA AND J. FUTRELL | |
| Mass Spectrometric Investigation of the Thermal Decomposition of Lithium Fluoroborate | 225 |
| M. VELJKOVIC, A. YA BORSHEVSKII, O. NESKOVIC, M. MILETIC, D. GOLOBOCANIN, V. E. VAISEBERG AND K. F. ZMBOV | |
| Homogeneous Bottleneck Model of Matrix-assisted Ultraviolet Laser Desorption of Large Molecules | 228 |
| A. VERTES, R. GIJBELS AND R. D. LEVINE | |

NUMBER 7 JULY 1990

| | |
|--|-----|
| Quadrature Heterodyne Method for Fourier-transform Ion Cyclotron Resonance Mass Spectrometry | 237 |
| M. FUJIWARA, H. KATAKURA AND M. INOUE | |
| Evidence for Distinction of <i>cis</i> and <i>trans</i> Isomers of Mono-unsaturated Fatty Acids by Fast-atom Bombardment Tandem Mass Spectrometric Analysis | 239 |
| N. JENSEN, K. LAM, R. B. CODY AND J. TAMURA | |
| Vibrational Excitation of N₂ by C⁺ Ions | 242 |
| A. R. LEE, C. S. ENOS AND A. G. BRENTON | |
| Thermospray Ionization with Repeller-induced Collisionally Activated Dissociation of Dyes | 245 |
| J. YINON, T. L. JONES AND L. D. BETOWSKI | |
| Effect of Different Target Gases on Low-energy Collision-activated Dissociation of Peptides | 251 |
| S. NAYLOR AND J. H. LAMB | |
| Singlet/Triplet Excitation (X¹Σ⁺ → a³Π_g) of CO by N⁺ and O⁺• | 256 |
| A. R. LEE, C. S. ENOS AND A. G. BRENTON | |
| Endothermic Ion/Molecule Reactions III. High Energy Collisional Activation at Low Kinetic Energies | 259 |
| R. ORLANDO, C. FENSELAU AND R. J. COTTER | |
| Matrix-assisted Laser Desorption of Peptides in Transmission Geometry | 263 |
| A. VERTES, L. BALAZS AND R. GIJBELS | |
| Molecular Weight Determination of Proteins from Multiply Charged Ions Using Thermospray Ionization Mass Spectrometry | 267 |
| K. STRAUB AND K. CHAN | |

NUMBER 8 AUGUST 1990

| | |
|---|-----|
| Do Deprotonated Semicarbazones Undergo the Negative-ion Beckmann Rearrangement in the Gas Phase? | 275 |
| G. W. ADAMS AND J. H. BOWIE | |
| The Unusual Collision-induced Dissociations of Deprotonated Cyclopentanones | 277 |
| M. J. ALEXANDER, M. J. RAFTERY, J. H. BOWIE AND R. N. HAYES | |

CONTENTS OF VOLUME 4

| | |
|--|------------|
| Electron Ionization Mass Spectra of some Cyclohexane Fused 2-N-Phenyliminoperhydro-1,3-oxazines and Related Thiazines | 279 |
| K. PIHLAJA, L. LOTJONEN, F. FULOP, G. BERNATH AND P. VAINIOTALO | |
| The Gas Phase Benzilic Acid Rearrangement | 283 |
| R. N. HAYES, P. C. H. EICHINGER AND J. H. BOWIE | |
| Analysis of Multi-domain Cellulolytic Enzymes by UV-laser Induced Desorption Mass Spectrometry | 285 |
| I. K. PERERA, E. UZCATEGUI, P. HAKANSSON, G. BRINKMALM, G. PETTERSSON, G. JOHANSSON AND B. U. R. SUNDQVIST | |
| Mass Spectrometric Investigation of Diphenylacetylene (Tolane) | 290 |
| D. SRZIC, M. ZINIC AND Z. MEIC | |
| Matrix-assisted Infrared-laser (2.94 μm) Desorption/Ionization Mass Spectrometry of Large Biomolecules | 293 |
| A. OVERBERG, M. KARAS, U. BAHR, R. KAUFMANN AND F. HILLENKAMP | |
| Accurate Ion Abundance Measurements in Ion Cyclotron Resonance Mass Spectrometry by Linear Prediction | 297 |
| J. F. LOO, M. D. KRAHLING AND T. C. FARRAR | |

NUMBER 9 SEPTEMBER 1990

| | |
|---|------------|
| The Detection of Large Molecules in Matrix-assisted UV-laser Desorption | 301 |
| B. SPENGLER, D. KIRSCH, R. KAUFMANN, M. KARAS, F. HILLENKAMP AND U. GIESSMANN | |
| A Study of Relevant Parameters in Collisional-activation of Ions in the Ion-trap Mass Spectrometer | 306 |
| J. GRONOWSKA, C. PARADISO, P. TRALDI AND U. VETTORI | |
| Fast-atom Bombardment Mass Spectrometry and Collisional Spectroscopy in the Structural Characterization of Underivatized 1,4-Benzodiazepines | 314 |
| E. GHEZZO, P. TRALDI, G. MINGHETTI, M. A. CINELLI, A. L. BANDINI, G. BANDITELLI AND L. ZECCA | |
| Artifacts in Four-sector Tandem Mass Spectrometry | 318 |
| A. M. FALICK, K. F. MEDZIRADSZKY AND F. C. WALLS | |
| Ion/Molecule Reactions of Protonated Bases of Atmospheric Importance | 323 |
| M. IRAQI, M. PERES, A. PETRANK AND C. LIFSHITZ | |
| Collisionally-activated Dissociation of Methane Molecular Ion. Analysis of a Mass-analysed Ion Kinetic Energy Peak Shape | 327 |
| B. J. KIM AND M. S. KIM | |
| Ion-trap Mass Spectrometry in Ion Structure Studies. I. Characterization of Isomeric Hydroxyindoles by Electron Ionization and Energy-resolved Collision-activated Mass Spectrometry | 335 |
| C. EVANS, S. CATINELLA, P. TRALDI, U. VETTORI AND G. ALLEGRI | |
| Collision-energy Ramp. A Modification to an RF-only Quadrupole Collision Cell | 341 |
| G. BOTT, S. OGDEN AND J. A. LEARY | |
| High-temperature Gas Chromatography/Mass Spectrometry of Triacylglycerols with Ammonia Negative-ion Chemical Ionization | 345 |
| R. P. EVERSHED, M. C. PRESCOTT AND L. J. GOAD | |
| Time-of-Flight Mass Spectrometry of Nucleic Acids by Laser Ablation and Ionization from a Frozen Aqueous Matrix | 348 |
| R. W. NELSON, R. M. THOMAS AND P. WILLIAMS | |
| Radical Identification by Liquid Chromatography/THERMOSPRAY Mass Spectrometry | 352 |
| H. IWASHI, C. E. PARKER, R. P. MASON AND K. B. TOMER | |
| The Characterization of Polystyrene Oligomers by Field-desorption Mass Spectrometry | 355 |
| K. ROLLINS, J. H. SCRIVENS, M. J. TAYLOR AND H. MAJOR | |

NUMBER 10 OCTOBER 1990

| | |
|--|------------|
| An Experimental Determination of the Energy of the First Triplet Doubly-ionized State of Ammonia | 366 |
| W. J. GRIFFITHS AND F. M. HARRIS | |
| Design and Performance of an Electrospray Ionization Source for a Double-focusing Magnetic Sector Mass Spectrometer | 369 |
| R. T. GALLAGHER, J. R. CHAPMAN AND M. MANN | |
| Deconvolution of Kinetic-energy Release Signals from Singly, Doubly, and Triply Charged Metastable Ions | 373 |
| G. K. KOYANAGI, J. WANG AND R. E. MARCH | |
| Fluorine Influence in the Mass Spectrometric Patterns in β-Hydroxy Alkyl Aryl Sulfoxides. Part 5 | 376 |
| R. SERAGLIA, P. TRALDI, P. BRAVO, G. RESNATI, O. BORTOLINI AND G. CAVICCHIO | |
| On-line Combination of Supercritical-fluid Chromatography with Fast-atom Bombardment Mass Spectrometry | 381 |
| K. MATSUURA, M. TAKEUCHI, K. NOJIMA, T. KOBAYASHI AND T. SAITO | |
| Ion Optical Considerations in Tandem Mass Spectrometry | 385 |
| A. J. H. BOERBOOM | |

CONTENTS OF VOLUME 4

| | |
|---|------------|
| Tandem Mass Spectrometry in the Clinical Analysis of Variant Hemoglobins | 396 |
| A. M. FALICK, C. H. L. SHACKLETON, B. N. GREEN AND H. E. WITKOWSKA | |
| A Membrane-inlet Tandem Mass Spectrometer for Continuous Monitoring of Volatile Organic Compounds | 401 |
| F. R. LAURITSEN, S. BOHATKA AND H. DEGN | |
| A New Gas Chromatography/Tandem Mass Spectrometry Method for Analysis of Monoaromatic Steroids in Petroleum | 404 |
| M. NALI, F. CORANA, A. RIVA, P. ALBRECHT AND P. WEHRUNG | |
| Collision-activated Dissociation Studies of Alkylamines Formed from Copper-induced Dealkylation of <i>N</i>-Alkylporphyrins | 406 |
| S. NAYLOR, A. H. GIBBS, J. H. LAMB AND F. DE MATTEIS | |
| Identification of Phosphoramido Mustard/DNA Adducts Using Tandem Mass Spectrometry | 410 |
| J. R. CUSHNIR, S. NAYLOR, J. H. LAMB, P. B. FARMER, N. A. BROWN AND P. E. MIRKES | |
| A Detailed Study of the Characteristics of the Ion-trap Mass Spectrometer Using Dynamically Programmed Scans | 415 |
| A. D. PENMAN, J. F. J. TODD, D. A. THORNER AND R. D. SMITH | |
| The Analysis of Smokestack Samples for Dioxins by Gas Chromatography/Mass Spectrometry and Gas Chromatography/Tandem Mass Spectrometry | 418 |
| C. MOORE, J. MONCUR, D. JONES AND B. WRIGHT | |
| Reproducing Daughter-ion Spectra Using the Transmission Oscillation Properties of Quadrupole Collision Cells | 421 |
| J. H. LAMB AND S. NAYLOR | |
| Deuterium Exchange Studies in the Identification of Alkylated DNA Bases Found in Urine, by Tandem Mass Spectrometry | 426 |
| J. R. CUSHNIR, S. NAYLOR, J. H. LAMB AND P. B. FARMER | |
| Fast-atom Bombardment Mass Spectrometry and Fast-atom Bombardment Tandem Mass Spectrometry of some Monosaccharide Oximes | 432 |
| A. P. NEW, N. J. HASKINS AND B. LEE | |
| A Fast-atom Bombardment Tandem Mass Spectrometry Screening Procedure for the Presence of Involatile Sulphonated Dyestuff Intermediates | 436 |
| J. J. MONAGHAN AND W. E. MORDEN | |
| Alternative Driving Functions for a Collision Quadrupole | 440 |
| M. BARBER, D. B. GORDON AND M. D. WOODS | |
| Theoretical Studies of Ion Trajectories in Quadrupole Systems | 442 |
| M. BARBER, D. B. GORDON AND M. D. WOODS | |
| Experience in the Use of a 4-Sector Instrument and Array Detector and its Application in Peptide Analysis | 447 |
| A. L. BURLINGAME, F. C. WALLS, A. FALICK, S. EVANS, A. RIDDOCH AND R. BUCHANAN | |
| The Use of Tandem Mass Spectrometry for the Differentiation of Bile Acid Isomers and for the Identification of Bile Acids in Biological Extracts | 449 |
| C. ECKERS, A. P. NEW, P. B. EAST AND N. J. HASKINS | |
| The Use of Tandem Mass Spectrometry as a Problem-solving Tool in the Industrial Environment | 454 |
| K. ROLLINS, J. H. SCRIVENS, R. C. K. JENNINGS, W. E. MORDEN, J. K. WELBY AND R. H. BATEMAN | |

NUMBER 11 NOVEMBER 1990

| | |
|--|------------|
| Use of Triethylammonium Formate to Enhance Sensitivity in Negative-ion Liquid Chromatography/Thermospray-mass Spectrometry | 463 |
| S. STEFFENRUD, E. DEWEY AND G. MAYLIN | |
| Characterization of Cyclodextrins Using Ion-evaporation Atmospheric-pressure Ionization Tandem Mass Spectrometry | 467 |
| E. C. HUANG AND J. D. HENION | |
| Loss of H₂ from Metastable CH₃SiH₂⁺ | 472 |
| S. TOBITA, K. NAKAJIMA, S. TAJIMA AND A. SHIGIHARA | |
| A Fourier Transform-ion Cyclotron Resonance Study of the Reactivity of Ionized Vinylalcohol with Selected Unsaturated Compounds | 476 |
| F. BERRUYER AND G. BOUCHOUX | |
| Variation of Kinetic Energy Release and Average Internal Energy with Temperature and Electron Energy for Unimolecular Ionic Transitions | 481 |
| E. T. M. SELIM, M. A. RABBIH AND M. A. FAHMEY | |
| Magic Numbers in Kinetic Energy Releases for Unimolecular Decompositions of Proton-bound Acetone and Acetone/Water Clusters | 485 |
| C. LIFSHITZ, M. IRAQI AND T. PERES | |
| Fragmentation of the Metastable Dieckmann Ester Molecular Ion: Loss of Carbon Monoxide | 488 |
| J. -P. MORIZUR, I. MARTIGNY, M. -H. TAPHANEL AND J. TORTAJADA | |

CONTENTS OF VOLUME 4

NUMBER 12 DECEMBER 1990

| | |
|---|------------|
| On the Formation of Doubly Charged Fragment and Cluster Ions of Oxygen- and Sulfur-containing Substances in Field Ionization and Field Desorption Mass Spectrometry | 493 |
| M. V. KOSEVICH AND V. S. SHELKOVSKY | |
| Analysis of Arachidonic-acid-containing Molecular Species in Glycerophospholipid Classes from Rat Kidney by Fast-atom Bombardment Mass Spectrometry | 495 |
| S. CHEN, R. MARIOT, G. KIRSCHNER, D. FAVRETTI AND P. TRALDI | |
| Electron-ionization-induced Fragmentation of N-Monosubstituted Phenylacetamides | 498 |
| L. A. JEREMIC, N. L. KOBILAROV AND S. D. PETROVIC | |
| Mass Spectral Study of 2-Adamantanone | 500 |
| D. SRZIC, V. VINKOVIC AND K. MLINARIC-MAJERSKI | |
| Gas Chromatography/Mass Spectrometry in the Elucidation of the Structure of Piperidine Alkaloids | 503 |
| M. MAKSIMOVIC, M. SOBER AND B. NIKOLIN | |
| Oil/Oil Correlation Based on Gas Chromatographic/Mass Spectrometric Analysis of Polycyclic Biomarkers | 505 |
| M. M. SABAN, B. S. JOVANCIĆEVIC, T. GLUMIĆ AND N. DOGOVIĆ | |
| Mass Spectrometric Study of Vaporization Processes and Thermodynamic Properties in the $\text{GeO}_2 \cdot \text{P}_2\text{O}_5$ System | 510 |
| V. L. STOLYAROVA, S. I. SHORNIKOV, G. G. IVANOV AND M. M. SHULTZ | |
| Mass Spectral Characteristics of some 3,5-Disubstituted 4-Isoazolecarboxylic Acids | 513 |
| M. MAKSIMOVIC, A. NIKOLIN AND B. NIKOLIN | |
| Mass-analysed Temperature-programmed Desorption from Glassy Carbon | 515 |
| M. LAUSEVIC, A. POPOVIC AND Z. LAUSEVIC | |
| Electrospray Interface for Liquid Chromatography/Mass Spectrometry | 519 |
| K. HIRAKA AND I. KUDAKA | |
| UV-laser-induced Desorption Mass Spectrometry of Insulin, Substance P and A4 Amyloid Protein Fragments from Synthetic Fibrillary Aggregates | 527 |
| I. K. PERERA, J. M. CANDY, P. HAKANSSON, A. E. OAKLEY, G. BRINKMALM AND B. U. R. SUNDQVIST | |
| Electrospray Mass Spectrometry of Recombinant Growth Hormones | 533 |
| L. BACZYNSKYJ AND G. E. BRONSON | |
| High- and Low-energy Tandem Mass Spectrometry of Oxonium Ions Formed by Fast-atom Bombardment Ionization of a Series of Diastereoisomeric 1,2-<i>trans</i>-2-deoxy-2-iodoglycosyl Azides | 536 |
| J. BANOUB, M. BECCHI, D. LAFONT, D. FRAISSE AND G. DESCOTES | |
| Sequence-specific Fragmentation from Oligopeptides Using Plasma-desorption Mass Spectrometry | 541 |
| A. M. BUKO AND V. K. SARIN | |
| Accurate Mass Measurement of Positive Ions Produced by Ammonia Chemical Ionization | 546 |
| D. L. LAWRENCE | |
| A Facile Method for the Localization of a Double Bond in Aliphatic Compounds | 550 |
| B. SCHNEIDER AND H. BUDZIKIEWICZ | |
| Electron Ionization Mass Spectrometry of Synthetic C₆₀ | 552 |
| D. R. LUFFER AND K. H. SCHRAM | |

